

Attorney Docket No.:50129/00202

In the Claims:

1. (Currently Amended) A medical apparatus comprising:

a flexible probe for accessing a patient's esophagus via the mouth, the probe, when in an operative position, extending from a proximal end which remains outside the patient to a distal end within the esophagus;

an echocardiography transducer coupled to the distal end of the probe so that, when the probe is in the operative position, the echocardiography transducer is at a predetermined location within the esophagus relative to the heart to perform a transesophageal echocardiography procedure; and

a flexible sheath sized to be received one of permanently and removably over the probe, the sheath including ~~[[an]]~~ a non-annular electrode so that the electrode, when in an operative position, contacts the esophagus to deliver a cardioversion current to the heart.

2. (Previously submitted) The apparatus of claim 1, wherein the electrode comprises a plurality of electrodes disposed on the sheath, each of the electrodes being coupled to a wire lead extending along the sheath to the proximal end of the probe to couple to a power source.

3. (Original) The apparatus of claim 2, wherein the power source is one of a defibrillator and a cardioverter.

4. (Original) The apparatus of claim 1, wherein the apparatus is used to treat cardiac arrhythmia.

5. (Previously submitted) The apparatus of claim 2, wherein, when the sheath is in an operative position on the probe, the electrodes are spaced along a longitudinal axis of the probe and

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wherein the electrodes are coupled to the power source via a plurality of leads so that the selected ones of the electrodes are energized to supply cardioversion current to portions of the heart located adjacent to the selected ones of the electrodes.

6. (Canceled)

7. (Previously submitted) The apparatus of claim 1, wherein, when the sheath is fixed at a predetermined location, the electrode is in a desired position relative to the echocardiography transducer.

8. (Previously submitted) The apparatus of claim 1, wherein the sheath is permanently bonded to the probe.

9. (Canceled)

10. (Previously submitted) The apparatus of claim 1, wherein the electrode is coupled to a wire lead which extends from the electrode along the sheath to exit the patient's body and couple to a power source.

11. (Original) The apparatus of claim 1, wherein the electrode is formed of a titanium foil.

12. (Original) The apparatus of claim 1, wherein the electrode has a length of 7-10 mm along an axial direction of the probe.

13. (Original) The apparatus of claim 2, wherein a proximal end of a first electrode is separated from a proximal end of a second electrode by a distance of 5 - 8mm.

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14. (Currently Amended) A cardioversion mechanism comprising a flexible sheath sized to be received one of permanently and removably over a transesophageal echocardiography probe, the flexible sheath including ~~[[an]]~~ a non-annular electrode assembly, wherein, when the sheath is received by the echocardiography probe, electrodes of the electrode assembly are located at a predetermined location with respect to the echocardiography probe, the electrode assembly being coupled to a power source for supplying a cardioversion current to a heart by contacting tissue located adjacent thereto when the echocardiography probe is in an operative position within an esophagus of a patient.

15. (Original) The cardioversion mechanism of claim 14; wherein the electrode assembly is one of a single use assembly and a multiple use assembly.

16. (Canceled)

17. (Previously submitted) The cardioversion mechanism of claim 14, wherein the electrodes and at least one lead wire coupling the electrodes to the power source are mounted one of within the sheath and on the sheath.

18. (Previously submitted) The cardioversion mechanism of claim 14, wherein the sheath is a bio-compatible material.

19. (Original) The cardioversion mechanism of claim 14, wherein the echocardiography probe includes a flexible insertion portion and an echocardiography transducer portion coupled to the flexible insertion portion.

20. (Currently Amended) A method of treating a heart of a patient, comprising the steps of:

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inserting into the patient's esophagus a device comprising a flexible probe having an echocardiography transducer coupled to a distal end thereof and a flexible sheath sized to be received one of permanently and removably over the probe, the sheath including at least one non-annular cardioversion electrode;

performing an echocardiography to analyze a condition of the heart; and

applying electric current to the at least one electrode to supply a cardioversion current to the heart by contacting the electrode to the esophagus when the echocardiography does not contraindicate cardioversion.

21. (Original) The method of claim 20, further comprising the step of performing an additional echocardiography immediately after the cardioversion using the echocardiography transducer.

22. (Previously submitted) The method of claim 20, further comprising the step of, prior to inserting the device into the esophagus, removably coupling the sheath to the probe.

23. (Previously submitted) The method of claim 20, further comprising the step of disposing the sheath after completing the procedure.

24. (New) The apparatus of claim 1, wherein the non-annular electrode has a circumferential length no more than half of that of a circumference of the probe.

25. (New) The apparatus of claim 1, wherein the electrode is C-shaped with an opening of at least 110 degrees.

26. (New) the apparatus of claim 1, wherein the sheath is removably attached to the probe.